

Official

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### AMENDMENTS TO THE CLAIMS AND ADDITIONAL CLAIMS

This listing of claims will replace all prior versions and listings of claims in the above-identified application:

#### Listing of Claims

*Sub B1*  
*AY cont*

**Claim 1** (Currently amended) A signal processing apparatus which processes a signal outputted from an image pickup element having filters arranged to use plural kinds of colors, comprising:

interpolation means for generating circuit which generates a plurality of color signals for each pixel position of the image pickup element by interpolation based on signals of pixels which surround said each pixel position of the image pickup element;

color-difference signal forming circuit for forming color-difference signals based on output of said interpolation circuit;

suppression means for suppressing circuit being provided in front of said color-difference signal forming circuit, which suppresses the plurality of color signals generated by said interpolation means circuit, if a level of a luminance signal is not lower than a first predetermined level and/or is lower than a second predetermined level; and

wherein it is so constructed that plurality of color signals suppressed which are output from said suppression circuit is regarded as input of said color-difference signal forming circuit matrix means for generating color-difference signals from the plurality of color signals suppressed by said suppression means.

**Claim 2** (Currently amended) A signal processing apparatus according to claim 1, further

comprising gamma correction means circuit provided between said suppression means circuit and said color-difference matrix means signal forming circuit, for performing which performs gamma correction on the plurality of color signals outputted from said suppression means circuit.

*AF Cont*

**Claim 3** (Currently amended) A signal processing apparatus according to claim 12, further comprising luminance signal correcting means for correcting circuit which corrects the luminance signal on the basis of the plurality of color signals suppressed by said suppression means circuit.

**Claim 4** (Currently amended) A signal processing apparatus according to claim 3, wherein said luminance signal correcting means circuit corrects the luminance signal before the luminance signal is gamma-corrected.

**Claim 5** (Currently amended) A signal processing apparatus which processes a signal outputted from an image pickup element having complementary color filters, comprising:

interpolation means for generating circuit which generates complementary color signals for each pixel position of the image pickup element by interpolation based on signals of pixels which surround said each pixel position of the image pickup element;

RGB matrix means for generating circuit which generates RGB signals from the complementary color signals interpolated by said interpolation means circuit;

color-difference signal forming circuit for forming color-difference signals based on the output by said RGB matrix circuit; and

suppression means for suppressing circuit being provided in front of said color-

*difference signal forming circuit, which suppresses the RGB signals generated by said RGB matrix means circuit, if a level of a luminance signal is not lower than a first predetermined level and/or is lower than a second predetermined level; and*

*wherein it is so constructed that RGB signals outputted from said suppression circuit are input into said color-difference matrix means for generating color-difference signals from the RGB signals suppressed by said suppression means signal forming circuit.*

*Claim 6* (Currently amended) A signal processing apparatus according to claim 5, further comprising gamma correction means circuit provided between said suppression means circuit and said color-difference matrix means, for performing signal forming circuit, which performs gamma correction on the RGB signals outputted from said suppression means circuit.

*Claim 7* (Currently amended) A signal processing apparatus according to claim 5.6, further comprising luminance signal correcting means for correcting circuit which corrects the luminance signal on the basis of the RGB signals suppressed by said suppression means circuit.

*Claim 8* (Currently amended) A signal processing apparatus according to claim 7, wherein said luminance signal correcting means circuit corrects the luminance signal before the luminance signal is gamma-corrected.

*Claim 9* (Currently amended) A signal processing apparatus which processes a signal outputted from an image pickup element having complementary color filters, comprising:

*interpolation means for generating circuit which generates complementary color signals for each pixel position of the image pickup element by interpolation based on signals of pixels which surround each said pixel position of the image pickup element;*

RGB matrix circuit which generates RGB signals from the complementary color signals; and

suppression means for suppressing circuit being provided in front of said RGB matrix circuit, which suppresses the complementary color signals interpolated by said interpolation means circuit, if a level of luminance signal is not lower than a first predetermined level and/or is lower than a second predetermined level; and

wherein it is so constructed that the color signals outputted from said suppression circuit are inputted into RGB matrix means for generating RGB signals from the complementary color signals suppressed by said suppression means circuit.

*AB Cont*  
**Claim 10** (Currently amended) A signal processing apparatus according to claim 9, further comprising luminance signal correcting means for correcting circuit which corrects the luminance signal on the basis of the complementary color signals suppressed by said suppression means circuit.

**Claim 11** (Currently amended) A signal processing apparatus according to claim 10, wherein said luminance signal correcting means circuit corrects the luminance signal before the luminance signal is gamma-corrected.

**Claim 12** (Currently amended) A signal processing apparatus which processes a signal outputted from an image pickup element having filters arranged to use plural kinds of colors, comprising:

interpolation means for generating circuit which generates complementary color signals for each pixel position of the image pickup element by interpolation based on signals of

pixels which surround said each pixel position of the image pickup element; and

suppression means circuit provided in front of between said image pickup element and said interpolation means, for suppressing circuit, which suppresses a color signal outputted from the image pickup means circuit, if a level of a luminance signal is not lower than a first predetermined level and/or is lower than a second predetermined level; and

a color-difference signal forming circuit for forming color-difference signals using color signals suppressed by said suppression circuit.

*PPY Canceled*  
**Claim 13** (Currently amended) A signal processing apparatus according to claim 12, further comprising luminance signal correcting image pickup means for correcting circuit which corrects the luminance signal on the basis of the color signal suppressed by said suppression means circuit.

**Claim 14** (Currently amended) A signal processing apparatus according to claim 13, wherein said luminance signal correcting means circuit corrects the luminance signal before the luminance signal is gamma-corrected.

**Claims 15-28** (Canceled without prejudice).

**Claim 29** (New) A signal processing apparatus which processes a signal outputted from an image pickup element having filters arranged to use plural kinds of colors, comprising:

a color-suppression circuit, provided for primary color signals or complementary color signals obtained from said image pickup element, for color-suppressing said primary color signals or said complementary color signals in accordance with the level of luminance signal; and

an image pickup device comprising a color signal processing circuit for processing output by said suppression circuit.

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**Claim 30 (New)** A signal processing apparatus according to claim 29, wherein said color signal processing circuit is a gamma-correction circuit for gamma-correcting the output signals suppressed by said suppression circuit.

**Claim 31 (New)** A signal processing apparatus according to claim 29, wherein said color signal processing circuit is a color-difference signal forming circuit for converting the output signals color-suppressed by said color-suppression circuit into color-difference signals.

**Claim 32 (New)** A signal processing apparatus according to claim 29, wherein said color signal processing circuit is a color-difference signal forming circuit for converting the output signals color-suppressed by said color-suppression circuit into color-difference signals.

**Claim 33 (New)** A signal processing apparatus according to claim 29, further comprising:

A/D conversion circuit for A/D converting primary color signals or complementary color signals obtained from said image pickup element before said color-suppression circuit.